

# FMON Addition

*Setup facility*

Sun, Sep 26, 1999

## *User interface*

When one modifies the node parameter on Page E, and the new value is in the Acnet IP node# range of 0900–10FF, then look up the corresponding IP address in the TRUNK table, assume the Acnet UDP port# 6801 and invoke PsNIPARP to get a pseudo node#. Replace the entered node# with this pseudo node#. The scheme allows much easier setup of frame capture monitoring of Acnet IP-based communications, as the program can automatically work out the dynamically-assigned—and therefore difficult to predict—pseudo node#, rather than doing a manual search of the ARP table and possibly initiating some activity that places an entry there in case it is not.

## *Implementation*

When initializing for a new capture session, when the capture ON bit is set, check for the node# parameter to be in the above range. Get the Acnet pseudo node# via PsNIPARP and overwrite the parameter with the pseudo node#. For reference, save the entered node# as an output parameter, so that when viewing Page E during a capture session, it is obvious what Acnet node# is being captured. In case this case does not apply, this reference parameter value is cleared.

During a capture operation, while the capture ON bit is set, FMON checks for a change in the node parameter value. If it changes, issue a short down-going pulse to the capture bit, so that it turns off the current capture, then right away turns on a new capture, at which point the logic above proceeds. Note that this will inhibit building up a capture session that switches to new node, appending captured frame diagnostics to those of the previous node.

During a capture operation, when the node parameter is a pseudo node#, FMON calls GetIPARP, in order to reset the timeout for that ARP table entry. (Without doing this, after somewhat more than an hour of inactivity, the ARP entry times out, and the freed entry may be reused for a different node whose frames could be erroneously appended to the previous accumulation.) This feature also allows for preparing far ahead of time for Acnet protocol frame capture.

When initiating capture, and the node parameter is a pseudo node# and the reference node is in the Acnet range, replace the node parameter with the reference node. This will keep the same Acnet node# when restarting FMON, say, to admit an updated version; thus, the reference node is in some sense an input parameter.